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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,932	10/04/2005	Michael Dettmers	SHEE 200060	6773
27885	7590	01/08/2008		
FAY SHARPE LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			EXAMINER LOPEZ, FRANK D	
			ART UNIT 3745	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,932

Applicant(s)

DETTMERS ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9, 12, 14-19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-9, 12, 14-19 and 21-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/4/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 10-24 been renumbered 12, 14-19 and 21-28.

Drawings

The drawings are objected to because in fig 4 identifiers 29 and 31 are interchanged (see e.g. page 8 line 8-9) and because there are no drawings filed in this case (the drawings used in the examination of this case came from the PCT application).

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pressure intensifier (claim 24 line 2-4) or the telescopic plungers (Claim 28 line 2) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 1-9, 12, 14-19 and 21-28 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 1 "A valve, in particular check valve" and line 2 "in particular for hydraulic plungers in underground mining" are confusing as to whether the limitation following the "in particular" is part of the limitation or not. In claim 1 line "with connections for high pressure lines connected to at least one of a cylinder chamber and an annular chamber" is confusing. There are only two pressure lines, one (17) to the annular chamber and the other (11) to the cylinder chamber. Since the limitation claims plural connections for plural pressure lines, the lines must be for both the annular and the cylinder chambers, or the connections and pressure lines must be singular. Since it is unclear whether singular or plural pressure lines are being claimed, other claims, claiming plural pressure lines are also confusing.

In claim 6 last line "the fastening plate"; claim 14 last line "the shield-type support frame"; claim 23 line 3-4 "the cylinder chamber connection bore"; claim 23 last line "the hydraulic outlet connection bore" and claim 27 line 2 "The hose connections and connection receptions" have no antecedent basis.

In claim 15 line 2-3 "one or preferably in both sides" is confusing as to whether the limitation includes only one or two sides.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-3, 6, 12, 14, 21, 23 and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tardy (see discussion below).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 15 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Tardy in view of Livengood. Tardy discloses a hydraulic cylinder comprising a valve housing (1, 36) fixed to the cylinder (35) and having a switchable valve insert (e.g. 16) received therein; with connections for high pressure line (114) axially parallel to an axis of the cylinder on a top side of the valve housing (when oriented perpendicular to the orientation shown in fig 2); and a connection (connected to 51) for an additional pressure sensor unit (9, 10); wherein releasable fastening means for an extension housing (cover for 2) mounted on a side wall of the valve housing; and wherein a hydraulic outlet (connected to 12, either in 1 or in 36) to the cylinder chamber is at a rear side of the valve housing; but does not disclose that the fastening means consist of thread bores in one side of the valve housing.

Tardy teaches, for a hydraulic cylinder comprising valve housing (1, 36) fixed to the cylinder (35); that a first element (36) can be mounted to a second element (35) through bolts (unmarked, fig 2) threaded into threaded bores (not shown, but inherent) of the second element.

It would have been obvious at the time the invention was made to one having ordinary skill in the art to form the fastening means of Tardy consist of thread bores in one side of the valve housing, as taught by Tardy, for the purpose of ease of assembly in the system, since one having ordinary skill in the art would have been able to carry out such a use and the results would be predictable work in the same manner.

Claim 28 is and are rejected under 35 U.S.C. § 103 as being unpatentable over Tardy in view of Block as applied to claim 1 above, and further in view of . The modified Tardy discloses all of the elements of claim 28, as discussed in the above rejection; but does not disclose that the hydraulic cylinder is telescopic, supporting a canopy with regard to horizontal skids of a shield type support frame.

Block teaches, for a hydraulic cylinder, with a lockable check valve (17); that it supports a canopy with regard to horizontal skids of a shield type support frame (fig 2).

Since Tardy has a hydraulic cylinder with a locking check valve; and Block teaches a use for a hydraulic cylinder with a locking check valve, it would have been obvious at the time the invention was made to one having ordinary skill in the art to use the hydraulic cylinder of Tardy, to support a canopy with regard to horizontal skids of a shield type support frame, as taught by Block, since one having ordinary skill in the art would have been able to carry out such a substitute use and the results would be reasonably predictable.

Official notice is taken that hydraulic cylinders can be either single stage or telescopic, depending on its use. It would have been obvious at the time the invention was made to one having ordinary skill in the art to make the hydraulic cylinder of Tardy telescopic, since one having ordinary skill in the art would have been able to carry out such a substitution and the resulting combination would predictable work in the same manner.

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Conclusion

Claims 4, 5, 7-9, 17-19, 22, and 24-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:00 AM -4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

/F. Daniel Lopez/

F. Daniel Lopez
Primary Examiner
Art Unit 3745
January 2, 2008